

## § 3280.812

Nameplate rating (in watts)	Use (in watts)
15,501 to 16,500 .....	9,600.
16,501 to 17,500 .....	10,000.

(6) If outlets or circuits are provided for other than factory-installed appliances, include the anticipated load. The following example is given to illustrate the application of this Method of Calculation:

*Example:* A manufactured home is 70×10 feet and has two portable appliance circuits, a 1000 volt-ampere 240 volt heater, a 200 volt-ampere 120 volt exhaust fan, a 400 volts-ampere 120 volt dishwasher and a 7000 volt-ampere electric range.

Lighting and small appliance load	Volt-amperes
Lighting 70×10×3 .....	2,100
Small Appliance .....	3,000
Total .....	5,100
1st. 3,000 Volt-Amperes at 100% .....	3,000
Remainder (5,100 – 3,000 = 2,100, at 35% .....	735
Total .....	3,735

	Amperes per leg A	Amperes per leg B
Lighting and small Appliance .....	15.5	15.5
Heater 240 volt .....	4.1	4.1
Fan 120 volt .....	1.7	.....
Dishwasher 120 volt .....	.....	3.3
Range .....	23.3	23.3
Total .....	44.6	46.2

Note: Based on the higher current calculated for either leg, use one 50-A supply cord.

(b) The following is an optional method of calculation for lighting and appliance loads for manufactured homes served by single 3-wire 120/240 volt set of feeder conductors with an ampacity of 100 or greater. The total load for determining the feeder ampacity may be computed in accordance with the following table instead of the method previously specified. Feeder conductors whose demand load is determined by this optional calculation are permitted to have the neutral load determined by Article 220.61 of the National Electrical Code, NFPA No. 70–2005. The loads identified in the table as “other load” and as “Remainder of other load” must include the following:

(1) 1500 volt-amperes for each 2-wire, 20-ampere small appliance branch circuit and each laundry branch circuit specified.

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(2) 3 volt-amperes per square foot for general lighting and general-use receptacles.

(3) The nameplate rating of all fixed appliances, ranges, wall-mounted ovens, counter-mounted cooking units, and including 4 or more separately controlled space heating loads.

(4) The nameplate ampere or kVA rating of all motors and of all low-power-factor loads.

(5) The largest of the following:

(i) Air conditioning load;

(ii) The 65 percent diversified demand of the central electric space heating load;

(iii) The 65 percent diversified demand of the load of less than four separately-controlled electric space heating units.

(iv) The connected load of four or more separately-controlled electric space heating units.

### OPTIONAL CALCULATION FOR MANUFACTURED HOMES WITH 110-AMPERE OR LARGER SERVICE

Load (in kilowatt or kilovoltampere)	Demand factor (percent)
Air-conditioning and cooling including heat pump compressors .....	100
Central electric space heating .....	65
Less than 4 separately controlled electric space heating units .....	65
1st 10 kW of all other load .....	100
Remainder of other load .....	40

[40 FR 58752, Dec. 18, 1975. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 58 FR 55021, Oct. 25, 1993; 70 FR 72052, Nov. 30, 2005]

### § 3280.812 Wiring of expandable units and dual units.

(a) Expandable or multiple unit manufactured homes shall use fixed-type wiring methods and materials for connecting such units to each other.

(b) Expandable or multiple unit manufactured homes not having permanently installed feeders and which are to be moved from one location to another, shall be permitted to have disconnecting means with branch circuit protective equipment in each unit when so located that after assembly or joining together of units the requirements of § 3280.803 will be met.